Indiana Congressional Military Assistance Briefing

September 2007

INDIANA OFFICE OF ENERGY & DEFENSE DEVELOPMENT

CENTRAL INDIANA CorporatePartnership

AGENDA

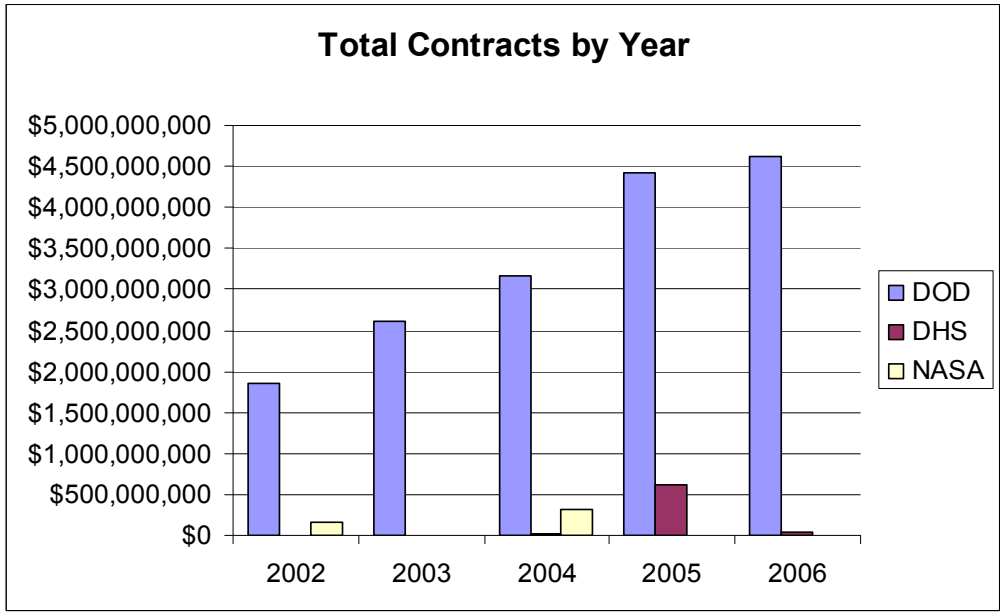
• Welcome	Dan Denning
• Overview of Findings	Dan Denning
• Proposed Action Plan Discussion	Dan Denning

Overview: Project Goals

1. Identify Indiana's defense assets
2. Determine DoD, DHS & NASA priorities, drivers and procurement forecast
3. Target opportunities & recommend a business plan to grow Indiana's defense industry

Overview: Indiana Assessment

DoD funding dominates in Indiana



IN's Top 5 Procurement Categories:

1. Wheeled Combat Vehicles (Humvees)
2. Electronics & Communications
3. Services
4. Aircraft Engines & Spares
5. Tracked Combat Vehicles (M1's)





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Overview: Indiana Assessment

10 MILITARY INSTALLATIONS

CAMP ATTERBURY
Edinburgh
Atterbury is also 1 of 6 Power Projection Platforms

MUSCATATUCK URBAN TRAINING CENTER
Butlerville
A full-emersion training environment; slated to train 1000's of soldiers with $100M's of DoD investment over 5 years

CRANE DIVISION, NAVAL SURFACE WARFARE CENTER
Crane
Over 3,000 Indiana employees

DEFENSE FINANCE AND ACCOUNTING SERVICE
Indianapolis
Gained personnel during BRAC

FORT WAYNE INTERNATIONAL AIRPORT GUARDAIR STATION
Fort Wayne
Gained assets during BRAC

HULMAN FIELD AIR NATIONAL GUARD
Terre Haute
275 personnel, property leased from International Airport

GRISSOM JOINT AIR RESERVE BASE
Kokomo
700 civilians employed, 1100 reservists

INDIANA ARMY AMMUNITION PLANT
Charlestown
Closed in 1995 BRAC, being cleaned up and converted to Industrial Park.

JEFFERSON PROVING GROUND
Madison
Closed in 1995 BRAC, now partially leased to Indiana National Guard for air-to-ground training

NEWPORT CHEMICAL DEPOT
Newport
Set to close after disposal of VX nerve agent

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Overview: Indiana's Targets

Focus Areas of Opportunity

- MUTC Partnership
- Transportation
- Services & Support
- Future Energy Alternatives
- Defense Electronics
- Advanced Military Informatics
- Bio Collaboration





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PROPOSED ACTION PLAN

Proposed Recommendation:

Establish a Public Private Partnership (P3) that leverages Indiana's defense assets and implements the defense development plan

- Provides state-wide reach and weight to local, regional & installation specific organizations
- Aggressively pursues key enablers to optimize MUTC Opportunity
- Works with Conexus Indiana and IEDC to support the focus action teams and other businesses pursuing DoD procurement & R&D opportunities
- Markets Indiana companies & capabilities to the Pentagon
- Establishes public/private agreements for commercials use of state/federal assets & vice-versa

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Why a P3?

- It is best practice. States leading in procurement contracts have formed P3 organizations
- P3 allows for: enhanced use agreements, cooperative R&D agreements, competitive/collaborative proposals.
- Indiana must do so in order to compete effectively
- Indiana has successful experience with setting up P3's: IEDC

OAI
Ohio Aerospace Institute

- Est. in 1989
- >$175M federal contracts
- $20M from grants/contracts has funded the org
- >250 awards
- 100 industry, university & government participants

SMART

- Est. early 1990's
- >$410M federal contracts
- 13 technology focus groups
- Participants include industry, university & government, including gov's, congr. reps & senators from MD, NJ, DE & PA

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Proposed Indiana Defense P3 Org:

- Mission: Leverage and grow Indiana's defense assets and implement the defense development plan
- Governance:
  - Chair: appointed by the governor
  - Board members: recruited from industry, university and government
- Funding sources: PTAC (Procurement Technical Assistance Center), federal/state grants, membership fees & contract administration fees
- Priorities: MUTC optimization, focus teams support & education, marketing/advocacy

Priority 1: MUTC Optimization

Vision: to make MUTC the nation's premier training center for urban/complex operations

- Convene Interagency working group to aggressively pursue land transfer
- Enable build-out of barracks/housing for up to 40,000 trainees per year
- Leverage Indiana National Guard & Denning relationships with the Pentagon for optimizing growth of MUTC
- Leverage DoD's $400M+ investment to spur services & economic development across the region
- Fully enable establishment and utilization of the Networked Urban Operations Test Bed (NUOTB)
- Promote MUTC's R&D, technology testing & evaluation capabilities to industry

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Priority 2: Support Focus Teams

- Conexus Indiana has agreed to reconvene Focus Action Teams and help them implement their biz plans
- Engage & Strengthen IN DOD industry associations
- Reform and reinvigorate PTAC
- Leverage SBDC, SBIR, OED and Crane small business advocacy programs
- Ensure sustainable, ongoing technical assistance program for small biz
- Educate small biz on 'how to' federal contract
- Advocate need for secure R&D center for DOD projects at an Indiana university
- Establish a statewide university skills database and business portal for customers, sponsors, planners

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Priority 3: Marketing/Advocacy

- Develop a merit-based prioritization process for congressional appropriations
- Market Indiana as an internationally known center of DOD and DHS testing and training
- Support an Indiana Congressional Defense Caucus
- Support an annual Indiana defense conference

Appendix

Focus Target Opportunities Details

Focus Target 1 : MUTC Partnership

What:

- **A DoD Opportunity in Indiana as big as Crane**
- **Fully leveraged DoD investment to optimize economic development**
- **Include students/citizens to augment the simulations who have language and cultural training appropriate to the simulated city**
- **Supply state produced military products to try in these simulations**
- **Operate a commercial side clearinghouse for technology providers who would want to be directly tested in these simulations**

Potential Opportunities:

- Permanently stationed active brigade
- Create a urban operation test bed available for commercial use - particularly well-suited for network-centric communications systems on future weapon systems
- Extension of the Indiana fiber optic network to support multiple, high definition feeds of the simulated city for participants and evaluators
- "Analyst of the Future", translators training for DOD, CIA, and DHS
- Real estate development, barracks build-out, land swaps

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Focus Target 2 : Transportation Systems

What it is:

- **Land vehicles, particularly, the "Next Generation Light Land Vehicle"**
- **Airplanes, particularly the Lightweight Jet (INSATS)**
- **Subsystems for vehicles**

How It's Used (Examples):

- **Next Generation**
- **Small, high speed**
- **Fuel efficiency**
- **Low environmental impact**
- **Ruggedness**
- **Low maintenance requirements**
- **Where needed, armor protection**

Indiana Assets (Examples):

- AM General
- Delphi, Remy
- Rolls Royce, Cummins
- Honeywell Aircraft Landing System
- Metadyne
- Purdue

Potential Opportunities:

- Next generation diesel-electric hybrid
- Next generation lightweight combat vehicle
- Next generation lightweight jet
- Autonomous flight software platform

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Focus Target 3: Defense Electronics

What it is:

- **Electronic products and systems to assist military, homeland security, and aerospace operations**

How It's Used (Examples):

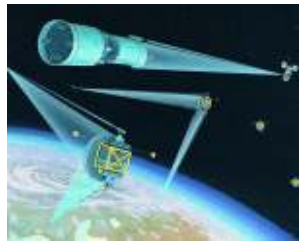
- **Voice/data/video communication networks**
  - **Sensor networks**
  - **Radar, RF, batteries**
  - **Electronic Warfare**
  - **Millimeter waves, Free Space Optics, Ultraviolet**
  - **Command/Control**

Indiana Assets (Examples):

- IU: Cyclotron Program
- Purdue: Center for Adv Manufacturing
- Crane
- SAIC, EG&G
- IT&T
- Raytheon
- Omega Wireless

Potential Opportunities:

- Millimeter wave/ Free Space Optics/ Ultraviolet communication test bed
- Electronic Warfare test range for commercial use



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Focus Target 4: Services & Support

What it is:

- **The provision of products and services for enhancing the usefulness and extending the life of current military and homeland security systems**

How It's Used (Examples):

- **End of life replacement parts,**
- **Ultra-machined retrofits & parts**
- **Composites**
- **New functions in existing packaging**
- **Tradecraft transfer to field units**

Indiana Assets (Examples):

- Purdue, Notre Dame, and IU
- Crane
- Rolls-Royce, Raytheon, ITT, Northrup Grumman, SAIC
- Aerodyn Engineering
- HUPP & Associates
- Smiths Aerospace

Potential Opportunities:

- Next Gen Field Repair
- "MASH" for repair of critical mission components
- clearinghouse for placing out-of-production parts orders
- "hard tactical problems" ultra-precision machining center

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Focus Target 5: Bio Collaboration

What it is:

- **The application of IN life sciences assets to DOD and DHS needs**
  - **Sensing chemical, biological, and radiation agents**
  - **Human sensors**
  - **Health data management**
  - **Outcomes management**
  - **Ortho**

How It's Used (Examples):

- **Agricultural Infrastructure Protection and at Ports**
- **Bio Shield**
- **Rehabilitating and returning the war fighter to battle**
- **Rehabilitation**

Indiana Assets (Examples):

- IU, Purdue, Notre Dame, Ivy Tech
- Eli Lilly
- Roche
- Zimmer, Biomet
- Griffin Analytical Technologies
- Andara Life Sciences
- BIOVITESSE

Potential Opportunities:

- Army $25M RFP for Head Trauma Research Center
- Mass spectroscopy reference spec & data base
- CBRNE sensors
- genetic model to map haplotypes to biotech treatments
- Create test fields to verify solutions for agricultural infrastructure protection

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Focus Target 6: Advanced Military Informatics

What it is:

- Development of algorithms in R&D and products
- Informatics in systems and devices
- Informatics in computer processing
- Information Security
- Includes cyber-infrastructure tools, visualization, and complex systems

How It's Used (Examples):

- First responder, border policing, criminal activities autonomous flight
- Data mining, combinatorial math, topology, pattern recognition, information encoding and simulation/modeling
- Allied to Computational Linguistics, Control Theory, Information Sciences, and Complex Systems Theory
- Data security

Examples-- Indiana Assets:

- IU Informatics School
- Purdue - CERIAS
- Notre Dame
- Statewide Urban Operations Test Bed
- Arxan Technologies
- InfoComm
- MNB Technologies
- Rolls-Royce

Potential Opportunities:

- Combine informatics with learning computers to solve Intelligence challenges, such as:
  - High speed language translation
  - Capturing a scene as a series of high level visual objects for later retrieval
  - Real time data capture, logging, and dissemination
- Create an Indiana Grid service for prototyping applications

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Focus Target 7: Future Energy Alternatives

What it is:

- The development of new ways to provide power, energy and fuels

How It's Used (Examples):

- Coal, bio matter (ethanol and bio-diesel), nuclear fusion/fission, solar, and wind
- Storage: New Materials Batteries, Fuel cells, and Ultra Capacitors
- Peak power technology to make existing mass power generation plants more efficient
- Portable Power

Indiana Assets (Examples):

- Coal, soy diesel, ethanol
- IU, Purdue, Notre Dame
- Crane
- Rolls Royce (mini turbines)
- iPower Energy Systems
- Remy (batteries)
- SAIC
- Peabody/Rentech
- Dwyer Instruments

Potential Opportunities:

- SAIC COE @ Crane
- USAF commitment to alternative fuels
- Batteries
- Hybrid electric vehicles, transmissions
- Biofuels